(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 13 January 2005 (13.01.2005)

PCT

(10) International Publication Number WO 2005/003569 A1

(51) International Patent Classification7:

F04D 29/54

(21) International Application Number:

PCT/KR2004/001610

(22) International Filing Date:

1 July 2004 (01.07.2004)

(25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data: 10-2003-0044222

1 July 2003 (01.07.2003)

- (71) Applicant (for all designated States except US): HALLA CLIMATE CONTROL CORPORATION [KR/KR]: 1689-1, Sinil-dong, Daedeok-gu, Daejeon-si 306-230 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHO, Kyungseok [KR/KR]. PARK, Seyoung [KR/KR].
- (74) Agents: PARK, Wonyong et al.; 5 Floor, Shinwon Bldg., 823-14, Yeoksam 1-dong, Gangnam-gu, Seoul 135-933 (KR).

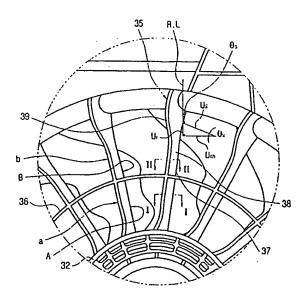
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, 1fr, HU, fd, 1L, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GII, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FL FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK. TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD. TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GUIDE BLADE OF AXIAL-FLOW FAN SHROUD



(57) Abstract: The present invention discloses guide blades of an axial flow fan shroud for guiding the air blown by an axial flow fan in an axial direction, and more particularly, to a guide blade structure capable of preventing the backflow of high temperature heat from an engine room toward a condenser. A guide blade 35 of an axial flow fan shroud 30 comprises: a leading edge 37 for introducing the air blown by an axial flow fan 10 including a number of blades 12; a trailing edge 39 extended from the leading edge 37 to downstream; and an air flow guide surface 38 for guiding the blown air between the leading and trailing edges 37 and 39, wherein if a first outlet area a is defined by at a radius r from a root in the total length R of an angle of projection Aout of the guide blade 35 and a second outlet area b is defined by the remainder, the angle of projection Aout increases as approaching a tip with respect to an axial line in the second outlet area b.

